

ABSTRACT

TITLE OF THE ABSTRACT: Ocular trauma due to fireworks: an observational study in a tertiary eye care centre

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OBJECTIVES: To review the epidemiological profile, nature and type of ocular trauma caused by fireworks. To characterize the visual outcome and prognosis in patients with ocular trauma due to fireworks.

METHODS: It is an observational retrospective and prospective study. Study population included all patients who came with history of ocular trauma due to firecrackers. Sample size calculated was 96. Patients recruited for the study were interviewed using a detailed questionnaire regarding the mode of injury and underwent ocular examination including visual acuity at presentation. Following which they were either treated conservatively or surgically according to the type of injury. Follow up of these patient at six months was done to determine the final visual acuity. Chi square test was done to obtain the factors which led to poor visual outcome.

RESULTS: According to this study, young males, upper lower class and bystanders formed the major proportion of those who were injured. Bombs and cone fountain caused most of the injuries and ground spinner being the least. Corneal epithelial defect was the most common injury among closed globe whereas corneal tear in open globe. 7 eyes had blindness due to firecracker injury. Based on this study, it was concluded that factors for poor visual outcome after firecracker injury were poor initial visual acuity ($p=0.046$) and open globe injury ($p<0.001$)

KEYWORDS

Fireworks, firecracker, ocular trauma, corneal epithelial defects, blindness, diwali